



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,376	07/01/2003	Kazuhiko Isogawa	0033-0887P	1200
2292	7590	03/29/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NUTTER, NATHAN M	
			ART UNIT	PAPER NUMBER

1711

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4D

Office Action Summary	Application No. 10/609,376	Applicant(s) ISOGAWA, KAZUHIKO	
	Examiner Nathan M. Nutter	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-7 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0205</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The objection of claims 3 and 4 under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim, is hereby expressly withdrawn.

The rejection of claims 1-4 under 35 U.S.C. 1 12, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby expressly withdrawn.

The following rejections are being maintained.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamada et al ('939).

The reference to Hamada et al ('939) teaches the manufacture of a golf ball that comprises a "thread wound core," wherein the threads are produced from a blend of "a natural rubber and a synthetic isoprene rubber having a cis-1,4 bond content of at least 90%," as herein recited and claimed. Note column 1 (lines 13-23) for the golf ball construction. Note the paragraph bridging column 2 to column 3 for the inclusions of the rubber constituents, that clearly teaches the employment of a "high-cis polyisoprene rubber having a cis content of 98% or more." Further, note column 4 (lines 19-26) for the vulcanization with sheet formation and thread production, and column 4 (lines 27-49) for the subsequent production of the golf ball using the rubber threads. Note Tables 1 and 2 at column 5 for the compositional limitations which embrace those recited in claim 2.

The constituents employed, their relative inclusion and the final product of a thread for production of a golf ball are shown by the reference. The reference is silent with respect to the "synthetic isoprene rubber having only a single peak" and the molecular weight distribution of the synthetic isoprene rubber. However, no difference is seen in the compositions or the end-use. A practitioner in the art would know how to manipulate the constituents to be effective for such end-use, including elasticity and other physical characteristics required. As such, and in view of a lack of unexpected results pertaining thereto, the composition and use of the instant claims would be at least obvious to one of ordinary skill in the art, if not anticipated thereover.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamada et al ('465).

The reference to Hamada et al ('465) teaches the manufacture of a golf ball that comprises a "thread wound core," wherein the threads are produced from a blend of "a natural rubber and a synthetic isoprene rubber having a cis-1,4 bond content of at least 90%," as herein recited and claimed. Note column 1 (lines 12-18) for the golf ball construction. Note column 2 (lines 22-65) for the inclusions of the rubber constituents. Further, note column 4 (lines 46-52) for the vulcanization with sheet formation and thread production, and column 4 (line 53) to column 5 (line 3) for the subsequent production of the golf ball using the rubber threads. Note Tables 1 and 2 at columns 5 and 6 for the compositional limitations which embrace those recited in claim 2.

The constituents employed, their relative inclusion and the final product of a thread for production of a golf ball are shown by the reference. The reference is silent with respect to the "synthetic isoprene rubber having only a single peak" and the molecular weight distribution of the synthetic isoprene rubber. However, no difference is seen in the compositions or the end-use. A practitioner in the art would know how to manipulate the constituents to be effective for such end-use, including elasticity and other physical characteristics required. As such, and in view of a lack of unexpected results pertaining thereto, the composition and use of the instant claims would be at least obvious to one of ordinary skill in the art, if not anticipated thereover.

Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Akita et al.

The reference to Akita et al teaches the manufacture of an elastomer/rubber blend that is produced from "natural rubber and a synthetic polyisoprene rubber that may be mixed in any proportion," as herein claimed. The polyisoprene is described as "having a cis-1,4 bond content of at least 90% by mole or more," as herein recited and claimed. Note column 3 (lines 21-36) for these teachings.

The constituents employed and their relative inclusion are shown by the reference. The reference is silent with respect to the "synthetic isoprene rubber having only a single peak" and the molecular weight distribution of the synthetic isoprene rubber. However, no difference is seen in the compositions, as claimed. A practitioner in the art would know how to manipulate the constituents to be effective for such end-use, including elasticity and other physical characteristics required. As such, and in view of a lack of unexpected results pertaining thereto, the composition and use of the instant claims would be at least obvious to one of ordinary skill in the art, if not anticipated thereover.

Response to Arguments

Applicant's arguments filed 25 February 2005 have been fully considered but they are not persuasive.

With regard to the rejection of claims 1-7 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamada et al ('939), "Applicants' Representative fails to see the disclosure in Hamada '939 of the cis-1,4

Art Unit: 1711

bond content of at least 90%," while ignoring the passage pointed out by the Examiner at the paragraph bridging column 2 to column 3 that includes a "mixture of the high-cis polyisoprene rubber and the low-cis polyisoprene rubber," wherein the high-cis polyisoprene rubber "(has) a cis content of 98% or more," and the low-cis polyisoprene rubber "(has) a cis content of about 92%" and "less than 98%." Further, it is pointed out that the language of the instant claims do not exclude the low-cis polyisoprene rubber, and, conversely, at a cis content of about 92% actually embrace the low-cis polyisoprene rubber. Applicants' Representative contends that the feature of "having a single peak of molecular weight distribution" would not be inherent in the composition of the reference, but provides no reasoning as to why it wouldn't other than that "the property alleged to be inherent must necessarily, not possibly, or even probably, be present as a result of the disclosed composition." Applicants' Representative provides no basis for this conclusion, either in practice or case law. The compositions of the reference are produced from identical constituents, combined in identical proportions, employed to produce an identical sheet, subsequently cut into threads and employed to produce the identical object, a golf ball. There is no reason to conclude otherwise, and, Applicants' Representative has provided none. There has been no showing made by Applicants' Representative that any difference exists. Applicants' Representative alleges that "(t)here is no disclosure of use of a rubber composition comprising at least 90% cis-1,4 bond-containing rubber," simply ignoring the passages cited in the Office Action drawn thereto, which teach clearly to use the same. Applicants' Representative, further alleges that "such synthetic rubbers as do have a single peak of molecular

Art Unit: 1711

weight distribution do not typically exhibit a ratio of weight average molecular weight to number average molecular weight within 2.5 to 3.7," without providing any support for the statement, and without showing that the high-cis polyisoprene rubber of the reference does not likewise have these properties. Finally, Applicants' Representative alleges that the "presently claimed composition is not obvious over Hamada '939 because selection of a synthetic rubber containing at least 90% cis-1,4 bond content and a molecular weight distribution that is a single peak when measured by gel permeation chromatography, and a ratio of Mw/Mn from 2.5-3.7 is not disclosed or suggested by the reference." It is pointed out that a reference is taken for the entirety of its teachings, and Applicants' Representative has failed to acknowledge those teachings in an attempt to proffer patentability of the instant claims. Applicants' Representative has placed a standard of 35 USC 102 in addressing the rejection made under 35 USC 103(a), and ignored key features of the invention as disclosed by the reference to Hamada et al ('939).

With regard to the rejection of claims 1-7 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hamada et al ('465), "Applicants' Representative fails to see the disclosure in Hamada '465 of the cis-1,4 bond content of at least 90%," while ignoring the passage pointed out by the Examiner at column 2 (lines 22-65) that includes a "mixture of the high-cis polyisoprene rubber and the low-cis polyisoprene rubber," wherein the high-cis polyisoprene rubber "(has) a cis-1,4 structure of 98% or more," and the low-cis polyisoprene rubber "(has) a cis

Art Unit: 1711

content of less than 92%," overlapping at 90 to 92 %. Further, it is pointed out that the language of the instant claims do not exclude the low-cis polyisoprene rubber, and, conversely, at a cis content of about 92% actually embrace the low-cis polyisoprene rubber. Applicants' Representative contends that the feature of "having a single peak of molecular weight distribution" would not be inherent in the composition of the reference, but provides no reasoning as to why it wouldn't other than that "(the) assertion is neither legally sufficient, and at least one fact premise upon which it is based is not correct," without providing any bases for such conclusion either in case law or based in literature or comparative showings. The compositions of the reference are produced from identical constituents, combined in identical proportions, employed to produce an identical sheet, subsequently cut into threads and employed to produce the identical object, a golf ball. There is no reason to conclude otherwise, and, Applicants' Representative has provided none. There has been no showing made by Applicants' Representative that any difference exists. Applicants' Representative alleges that "(t)here is no disclosure of use of a rubber composition comprising at least 90% cis-1,4 bond-containing rubber," simply ignoring the passages cited in the Office Action drawn thereto, which teach clearly to use the same. It is pointed out that a reference is taken for the entirety of its teachings, and Applicants' Representative has failed to acknowledge those teachings in an attempt to proffer patentability of the instant claims. Applicants' Representative has failed to address the rejection of these claims as applied under 35 USC 103(a) over the teachings of this reference.

With regard to the rejection of claims 1, 2 and 5-7 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Akita et al, Applicants' Representative alleges that "(t)here is no evidence of record that establishes that these features (that the composition has a single peak in molecular weight, and a ratio of Mw/Mn of from 2.5 to 3.7) recited in claim 1 would necessarily be found in the compositions disclosed by Akita." Again, Applicants' Representative has placed a standard of 35 USC 102 in addressing the rejection made under 35 USC 103(a), and ignored key features of the invention as disclosed by the reference to Akita et al. furthermore, it is pointed out to Applicants' Representative that the instantly rejected claims are drawn to a rubber composition, *per se*. The intended use, as recited, "thread," fails to give any patentable weight since the use of the composition would be recognized and known by one having an ordinary skill in the art. Regardless, the compositions are identical, as disclosed and claimed herein. Again, Applicants' Representative has failed to address the rejection of these claims as applied under 35 USC 103(a) over the teachings of this reference.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

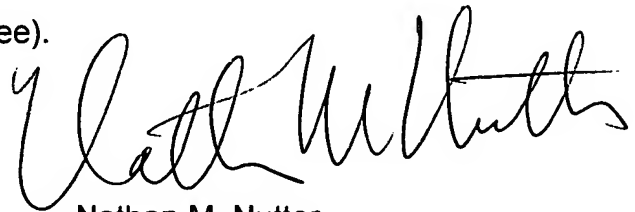
Art Unit: 1711

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Nathan M. Nutter", is positioned above the printed name.

Nathan M. Nutter
Primary Examiner
Art Unit 1711

nmn

23 March 2004